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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,295	07/13/2006	Eric Courbon	034299-000706	3081

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EXAMINER

FISHMAN, MARINA

ART UNIT	PAPER NUMBER
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2832

MAIL DATE	DELIVERY MODE
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04/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,295	Applicant(s) COURBON ET AL.	
	Examiner Marina Fishman	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General status

1. This is a Final Action on the Merits. Claims 1 - 12 are pending in the case and are being examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yin [US 4,800,242] in view of Sfondrini et al. [WO 00/05735.]

Yin discloses a device for controlling a circuit breaker intended for opening and closing the device comprising:

- a mobile contact [20, upper];
- a motor [12-10, Figure3] with a rotary output shaft [12-12, 12-8] and being connected to power supply means [not shown] and to actuation means [40] transforming the output displacement of the actuation means into a displacement of the contact,
- a mechanical spring arrangement [Figure 2] involved in opening and closing the contact, the spring arrangement including two pre-stressed and antagonist mechanical springs [28A, 28B], an opening spring, ensuring the opening of the contact and a closing spring, ensuring the

closing of the contact, the actuation means being stressed by each of these two springs separated by a ring [45], and including an arrangement for immobilizing the contact in the open position and the closed position [48, 50];

- the actuation means include a set of jointed elements [44, 12] providing the connection of the rotary shaft and of the ring, and in that, in the closed position of the contact [Figure 1], the set of jointed elements abuts against an abutment element [48] near an open dead center position [Figure 1], the opening spring only being able to drive it towards the open position [Figure 2] upon moving past the open dead center position during opening.

Regarding Claim 1 Yin discloses a manual actuation means, however do not disclose a motorized actuation means. Sfondrini et al. [Figure 10] disclose a motorized actuation means, comprising a motor [60], a shaft [61] a set of gears [78, 81] and jointed elements [64, 640]. The actuation means would have a maximum displacement when the jointed elements or linkage [64, 640] is at an open dead center position [Figure 9] and can only move in the opposite direction. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide motorized opening and closing system for contacts, in Yin as suggested by Sfondrini in order to have quicker response time.

Regarding Claim 2, the modified device of Yin will have a set of jointed elements comprises a crank [12] configured driven into rotation by the output shaft and jointed at

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one end of a connecting rod [44], the other end of which is jointed on the ring [45].

Regarding Claim 3, in the open position of the contact, the set of jointed elements abuts against the abutment element [48, 50] near a closed dead centre position, the closing spring [28B] being only able to drive it towards the closing position upon moving past this dead centre during closing. Regarding Claim 4, the crank is driven into rotation by the output shaft via a toothed segment [Sfondrini, 78, 80] meshed on the output shaft and on which it is jointed. Regarding Claims 5 and 6, Although, Sfondrini does not disclose power converter, speed regulators and damper, it would have been obvious to provide power converter, speed regulators and damper, connected to the motor of Sfondrini in order to control the speed of the movement of the connecting rod.

Regarding Claim 7, Yin discloses springs [128A, 28B] that are mounted aligned along an axis, one of their respective ends abutting against a spring abutment [housing 38] and the other end of the springs being separated by a ring [45]. Regarding Claims 8 and 9, the device includes an arrangement for disengaging the action of the closing spring [by operation of flange with collars 58, 60]. Regarding Claims 10 and 11, the device comprises a device for pushing the set of jointed elements towards its open dead centre [by operation of motor and elements 48, 50] and the pushing device consists in a striker [one of 48, 50] intended to stress [or stop] the crank [12].

Response to Arguments

4. Applicant's arguments filed February 28, 2008 have been fully considered but they are not persuasive.

The Applicant has argued that the springs of Yin (referring to column 4, lines 6 – 9, Yin) are not stressed when the contacts are in closed position, but are in relaxed position. The Applicant did not specifically point out, which part recitation of Claim 1, is not met. As described in columns 4 and 5, although springs are referred to as relaxed state, Figure 1 clearly suggest spring 28A, being slightly compressed and the switch is in closed state during movement of housing downward, [Figure 3] and the spring 28A is compressed and spring 28B is expanded creating a downward force on connecting element 45. The Applicant also argued about “open dead center” and “closed dead center” positions of the drive arm. Since the “open dead center” and “closed dead center” are the terms used to associate the position of drive arm at the “open” and “close” positions of the contacts, the Examiner has taken drive arm position of Yin for open and closed positions of the contacts, as open dead center and closed dead center.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is (571)272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/
Supervisory Patent Examiner, Art
Unit 2832

/Marina Fishman/
Examiner, Art Unit 2832
April 7, 2008

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